

### Abstract Of The Disclosure

A state variable and parameter estimator for determining state variables and parameters of a mathematical energy storage model, especially of a battery model, which calculates the state variables and the parameters from operating variables of an energy storage device. A

- 5 particularly simple estimation of the state variables and the parameters may be carried out if the state variable and parameter estimator includes a plurality of mathematical submodels which are valid for different working ranges and/or frequency ranges of the energy storage device.